

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019826**Date Inspected:** 26-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Listed below.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** S.A.S. components**Summary of Items Observed:**

The Quality Assurance Inspector (QAI), Scott Croff, was present at the Self Anchored Span (SAS) job site to observe the scheduled fabrication and welding of components for the SFOBB project. The following observations were made:

- 1) OBG field splice welding at 9E/10E
- 2) OBG deck hole patch welding
- 3) Document review at Pier 7

1) The QAI observed ABF personnel welding plate B and plate A at OBG lifts 9E/10E field splice. The QAI noted that the Quality Control (QC) Inspector Fred Von Hoff is monitoring this welding. At weld B, the QAI observed ABF worker Xiao Jian Wan, ID 9677, making the vertical (3G) complete joint penetration (CJP) weld using shielded metal arc welding (SMAW) with E7018-H4R electrodes. The QAI was informed that welding procedure specification ABF-WPS-D15-1040A is being used at this location. At weld A5, the QAI observed ABF worker Wai Kitlai, ID 2853, making flat (1G) CJP weld repairs using SMAW with E7018-H4R electrodes. The QAI was informed that ABF-WPS-D15-1001-Repair is being used for this welding. The QAI randomly measured the preheat, interpass temperature and welding parameters and noted that they appeared to be conforming to the WPS requirements. The QAI also observed QC Inspectors John Pagliero and Jesse Cayabyab conducting Ultrasonic Testing (UT) of completed repairs on weld segments A3 and A4. At the time of observation, the QAI was informed that all repairs tested with UT are acceptable.

- 2) The QAI made observations of welding of the OBG deck hole patches on the East line of the S.A.S. OBG

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structure. The QAI noted that these patches are being placed and welded into the lifting lug holes. The QAI observed Salvador Sandoval, ID 2202, fitting and welding lifting lug patch at PP44 E3 #1. The QAI noted that the QC Inspector Steve McConnell is monitoring the fitting and welding. The QAI noted that ABF-WPS-D15-1050A is being used for this welding. The QAI randomly measured the welding parameters and noted that they appeared to be conforming to the WPS requirements. This work was in progress at the end of the shift.

3) The QAI reviewed contract related documents including the submitted and approved Welding Quality Control Plan (WQCP) and approved revisions to the WQCP. The QAI continued reviewing the informal weekly welding report packages #43 and #44. The QAI continued consolidating the information from previous welding report submittals to identify missing reports of inspections. The QAI continued generating a weld specific tracking list from the contractor's welding reports.

Summary of Conversations:

The QAI had general conversations with ABF and Caltrans personnel during this shift. The QAI had a conversation with the Caltrans Representative Rob Feather. The conversation was regarding request for information (RFI) 1871 and the work that has been performed by the contractor. The QAI informed Mr. Feather that OBG attachments have been welded at this time. The QAI asked for clarification to ANSI B31.3 visual inspection category for the mechanical piping that is being welded at this time, as the QAI has not been able to locate which service category the piping will be used. The QAI was informed by Mr. Feather that the second service category could be used, however, he was not certain. The QAI was informed that additional research will be made. The QAI relayed this information to the QAI Rick Bettencourt. The QAI relayed the observations of welding and the status of submittal reviews to the QAI Lead Bill Levell. Except as described above, there were no other notable conversations or observations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Sang Le (916)764-5650, who represents the Office of Structural Materials for your project.

Inspected By:	Croff, Scott	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
